AD-A046 838 AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OHIO F/G 5/1
UNITED STATES AIR FORCE SECURITY POLICE EFFECTIVENESS AS A FUNC--ETC(U)
JUL 77 J S COSTELLO

UNCLASSIFIED AFIT-CI-77-89 NL

END
DATE FILMED
12-77
DDC

AD A046838

77-87-T

(1)

(6) UNITED STATES AIR FORCE SECURITY POLICE EFFECTIVENESS AS A FUNCTION OF MANAGEMENT STYLE

(10) JOHN STEPHEN COSTELLO
B.A., Northeastern University, Boston, 1966

THESIS

Submitted in partial satisfaction of
the requirements for the degree of

MASTER OF ARTS

in

CRIMINAL JUSTICE

at

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

AD No. DDC FILE COPY

(9) Master's thesis,

(11) Jul 77

(12) 64 p.

(14) AFIT-CI-77-89

APPROVED:

Peter S. Venezia 7/21/77, Chairman

James M. Poland, Second Reader

Date: July 22 1977

012 200

DDC
RECEIVED
NOV 28 1977
B

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER CI 77-89	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) United States Air Force Security Police Effectiveness as a Function of Management Style		5. TYPE OF REPORT & PERIOD COVERED Thesis
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Captain John S. Costello		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS AFIT Student at California State University, Sacramento CA		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS AFIT/CI WPAFB OH 45433		12. REPORT DATE July 1977
		13. NUMBER OF PAGES 53 Pages
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for Public Release; Distribution Unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

APPROVED FOR PUBLIC RELEASE AFR 190-17.

JERRAL F. GUESS, Captain, USAF
Director of Information, AFIT

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

ACKNOWLEDGEMENTS

The writing of this Thesis would not have been possible without the cooperation and help of a number of people. In particular, I would like to thank the following:

Major Steven Heppel, CSP, Castle AFB
Major Horace Humphries, CSP, Travis AFB
Major Michael McInerney, CSP, Mather AFB
Major Brian Mulrey, CSP, Beale AFB
Capt. Steven Schmidt, CSP, McClellan AFB

Their help and assistance was invaluable in completing the research.

I would also like to thank all the officers and NCOs of the five units who were kind enough to take the survey instrument.

My special thanks go to Dr. Peter Venezia and Dr. James Poland for their invaluable guidance and encouragement at all stages of the research.

To my wife, Joanie, I owe a tremendous debt for her invaluable help. Her long hours of typing and editing produced the final product at hand.

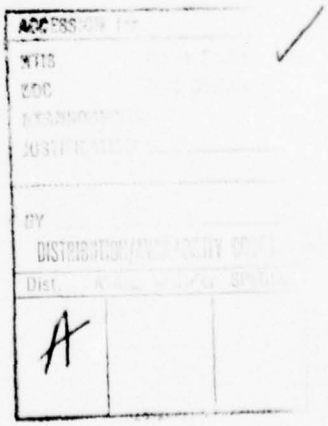


TABLE OF CONTENTS

Introduction..... 1

Chapter

I. Management Style and Employee Effectiveness..... 2

II. The Research Design and Methodology.....17

Methodology

III. Results

IV. Discussion.....26

Conclusions

Bibliography.....51

Appendix.....54

LIST OF TABLES

1. Rank Ordering of "Existing" and "Desired" Individual Means.....27

2. Rank Ordering of Data by Independent Variable Category.....29-30

3. 2x6 Chi Square Table.....31

4. 2x2 Chi Square Table.....32

5. 2x1 Chi Square Table.....32

6. Rank Ordering of Data by Years of Service.....35

7. Mean Questionnaire Scores by Designated Sub Groups....37

8. Comparison of Officers Flight vs. Overhead 38

9. Comparison of NCO's by Specialty.....40

10. Officer and NCO Ranked by Years of Service.....41

11. Comparison of CSP's and Flight Chiefs.....42

12. Desired Situation.....42

INTRODUCTION

This thesis deals with management effectiveness. The major focus is upon participative management and its relationship to organizational productivity. A secondary area is an examination of differences in management styles that can be attributed to time on the job, specifically within the organization or position in the organizational hierarchy.

The majority of material published in recent years tends to support a participative style of management as being most effective. Yet, most of our large public bureaucracies tend to rely on the more authoritarian style as the primary method of management. This is particularly true of the military, in which the traditional command structure is deeply entrenched.

This paper will attempt to explore the hypothesis that a more participative style of management can be more effective within the United States Air Force Security Police Squadrons, especially in view of the highly qualified and educated individuals who are coming into the Air Force today.

CHAPTER I

MANAGEMENT STYLE

AND

EMPLOYEE EFFECTIVENESS

Management has risen from an almost unrecognized position in 1900 to be the central activity of our society. And, as we become increasingly more an organizational society, the importance of effective management grows apace. Etzioni put it aptly:

> Our society is an organizational society. We are born in organizations, educated by organizations, and most of us spend much of our lives working for organizations. We spend much of our leisure time paying, playing and praying in organizations. Most of us will die in an organization, and when the time comes for burial, the largest organization of all - the State - must grant official permission.[1]

"Management is at one and the same time the determiner of our national progress, the supervisor of our employed, the amasser of our resources, the guide for our effective government, and the molder of our society."[2]

---

[1] Amitai Etzioni, Modern Organizations (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964) p. 1.

[2] Paul M. Whisenand and R. Fred Ferguson, The Managing of Police Organizations (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973) p. 6.

Within the military and specifically the Air Force Security Police, we are seeing many people with varying orientations to life, that were identified in an intensive study of life styles by Thomas Bier

> The first of these stems from the industrial revolution and the emsuing era of highly structured bureaucracies and is termed the formal orientation. The formalistic individual needs to receive direction from authorities before he acts. He is dependent upon direction from these authorities. In a strict sense, he does what he is told, while in a broader sense, he works within boundaries or guidelines or in directions established by superiors, teachers, superordinate powers or authorities. A second perspective, the social orientation, has evolved over the past thirty years concurrently with an increased emphasis upon industrial humanism and a consideration of the human or social aspects of organizations. Individual action by the socially oriented person is preceded by discussion and agreement with others, such as his superior, the boundaries (limits, goals and standards) in which he will operate (control and direct himself). A Third orientation has only recently emerged, perhaps during the last five to ten years. It is a personal orientation in which the individual looks within himself and questions himself as to his own experience for direction. Thus, the individual's behavior is based on direction from within.
>
> An increasing proportion of people in our society hold social and personal orientations, and conversely a decreasing proportion hold formal orientation.[3]

---

[3]Frank Friedlander, Technology, Youth and Organizational Structure: Some Changing Patterns Relevant to the Military (Technical Memorandum No. 7, June, 1969. This report was presented to the Conference on Leadership and Organization in the Post 1970's, held at West Point, New York, June 25-27, 1969. The conference was sponsored by the Deputy Chief of

Friedlander[4] states that the formally oriented individual has his behavior determined by what is acceptable to the organization. Group norms tend to determine the behavior for the socially-oriented individual. Authority and hierarchical structure are minimized. The important point to be made is that one must act on his own, free of authoritative direction, but his actions come after discussion with authorities, peers, or subordinates.

Behavior of the personally-oriented is determined by the meaning of his current experience. He is oriented to the present not the future, and the present must provide him with meaningful involvement. If the personally-oriented does not experience meaning, he has no basis for commitment.

Friedlander's characterization of management systems is one of several. For purposes of this paper, the authoritarian-participative continuum will be the one explored. At the authoritarian end would be those systems that contain many or most of the summarized principles as described by Fayol:

Staff for Personnel, U.S. Army, and the Superintendent, U.S. Military Academy. This report was prepared as part of the activities of the Department of Organization and Administration, School of Management, Case Western University (partially under Contract No. DAHC 19-68-G-0007 with the Department of Defense). Reproduction in whole or part is permitted for any purpose of the United States Government, p. 34.

[4]Ibid., p. 5.

1. Division of Work - the specialization of workers, including management, to improve efficiency and increase output.

2. Authority and responsibility - "the right to give orders, and power to exact obedience". Responsibility occurs as a direct result of authority.

3. Discipline - in essence "obedience, application, energy, behavior given to the organization, and it depends on the worthiness of the leaders.

4. Unity of Command - the principle that no one should have more than one boss.

5. Unity of Direction - specifies that in addition to having only one boss, there should be only one plan for accomplishing goals.

6. Subordination of individual interests to the general interest - the organization's concerns should be placed ahead of individual concerns.

7. Compensation of Personnel - Fayol specifies fair pay arrangements, satisfactory to all, whereby competence is rewarded but not overrewarded.

8. Centralization - consolidation of the management function should be done according to the circumstances surrounding the organization.

9. Scalar Chain - the chain of command can have several tracks to the top position, i.e. operations maintenance, etc. Persons at parallel levels down the track may be authorized to solve problems with the superior's knowledge.

10. Order - the principle that everyone has a position and should operate from only that position; similarly, all materials should have, and be in, a certain place.

11. Equity - loyalty should be encouraged by kindliness and justice, but does not exclude

sterness and forcefulness when needed.

12. Stability of tenure of personnel - the high turnover of personnel both causes and is the result of inefficiency; better organizations have stable managerial personnel.

13. Initiative - the necessity for "thinking out a plan and ensuring its success". Fayol sees this as a strength for businesses, particularly during hard times.

14. Esprit de corps - morale and team feeling are enhanced by keeping teams together and having good face-to-face communication.[5]

An overall statement could be made that in this approach, workers are seen as extensions of the machine or the task to be performed. Frederick W. Taylor[6] epitomized this conception with his scientific management construct. Taylor applied scientific techniques in his search for the "one best way". His theories were eventually translated into a system of efficiency experts and into time and motion studies. Motivation in this management system is essentially negative, i.e. punishments and discipline. When positive motivation is used, it is generally limited to extrinsic rewards, i.e., raises in pay and vertical movement.

At the opposite end of the continuum would be found the participative style of management. Characterized by

---

[5]Henri Fayol, General and Industrial Management, trans. C. Storrs (London: Sir Isaac Pitman and Sons, 1949), quoted in Edgar F. Huse and James L. Bowditch, Behavior in Organizations: A Systems Approach to Managing (Reading, Mass.: Addison-Wesley Publishing Co. 1973) p. 11.

[6]Ibid., p. 13.

Likert in his "System Four"[7], participatory management embodies several principles. Managers have complete confidence in their subordinates; conversely subordinates feel free to discuss things about their job with their superiors. Additionally, ideas and opinions are solicited actively from the subordinates to be incorporated into the management system.

Motivation in this system includes a variety of factors. Pay and other economic rewards are based on a system developed through involvement and participation in setting goals and measuring an individual's progress toward attaining those goals. As a result, personnel at all levels of the organization develop a feeling of responsibility for the organization's goals. Communication is characterized by openness and freedom; information flows up, down and laterally with equal ease. A major point is that much of the flow is directed at achieving the organization's objectives. Upward and downward communication is accurate and accepted by all levels. Another major point is that the supervisors know and understand the problems of their subordinates. There is no attempt to exclude any facet of the worker's personality. An extensive amount of cooperative teamwork is present. Decision making authority is widely dispersed throughout the organization with subordinates fully involved in decisions related to their work. The organization's goals are usually

---

[7]Rensis Likert, The Human Organization: Its Management and Value, (New York: McGraw-Hill Book Co., 1967) pp. 4-10.

established by group process except in a crisis, and are accepted totally by all levels. The system is characterized by a lack of covert resistance, or overt for that matter, to the objectives of the organization, and the informal and formal organizations are one and the same. The job tends to be fitted to the individual rather than vice versa. The importance of extrinsic rewards is recognized. They are not, however, used to the exclusion of intrinsic rewards, such as job satisfaction. There is, in fact, a concerted effort by the organization to make job satisfaction the prime reward. This is in line with Herzberg's "Motivator-Hygiene Theory"[8] in that a great many employee dissatisfiers can be removed by giving more pay, improving working conditions, etc., but this does not provide individual motivation. The employee is just less dissatisfied with the organization. Formal disciplinary action is used only after peer pressure and informal organizational actions have failed. Even at this point, the disciplinary action tends to be much more humanistic and individualized than it is within the authoritarian system.[9]

While it is recognized that neither of the two models discussed may ever be seen in toto in an actual organization,

---

[8]Paul Hersey and Kenneth H. Blanchard, Management of Organizational Behavior, (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972) pp. 54-65.

[9]The bulk of the preceding is abstracted from Warren G. Bennis, and Philip E. Slater, The Temporary Society (New York: Harper and Row, Publishers, 1968) p. 4 and Rensis Likert, New Patterns of Management (New York: McGraw-Hill Book Co., 1961) p. 243.

the descriptions are given to peg the extremes of the continuum.

In the past thirty years, participative management has arisen to challenge the traditional authoritarian model. As Miles[10] states, managers have been instructed to consider the worker as a whole person rather than as merely a bundle of skills and aptitutdes. They are urged to create a "sense of satisfaction" among their subordinates by showing interest in the employees' personal success and welfare. As Bendix notes, the "failure to treat workers as human beings came to be regarded as the cause of low morale, poor craftsmanship, unresponsiveness, and confusion."[11]

In the early studies of the Survey Research Center at the University of Michigan,[12] there was an attempt to look at management from the aspect of locating clusters of characteristics that seemed to be correlated. The studies identified two concepts which parallel the authoritarian-participative continuum. These were the job-centered and employee-centered orientations.

These clusters of traits seem to indicate that the authoritarian managerial style is very much job-centered -- the individual manager is concerned with production and job accomplishment and all else is secondary. The employee-

---

[10] Raymond E. Miles, "Human Relations or Human Resources", Harvard Business Review (July-Aug 1965) p. 152.

[11] Ibid.

[12] Hersey and Blanchard, Management, p. 72.

centered orientation, on the other hand, closely follows the participative style. There is still a concern for job accomplishment; however, the attainment of this goal is through cooperative effort on the part of all. An involvement exists between the employees and the managers in a common task.

Much of the management literature is pervaded with the writings of the various behaviorists. McGregor's classic Theory X -- Theory Y;[13] Likert's Four Systems;[14] Bennis,[15] Blake[16] and their disciples. After an analysis of the authoritarian system, they all call for a movement toward a more participative style to make use of the available potential of the workers.

The problem of central concern in this thesis is that the majority of Air Force Security Police managers tend to the authoritarian model; the traditional hierarchical leadership style that has developed over time within the military. This military model has come to be accepted by management theorists as the prototype of the totally authoritarian managerial beliefs. McGregor[17] characterizes a "Theory X" manager

---

[13]Ibid., p. 46.

[14]Likert, Human Organization, pp. 4-11.

[15]Hersey and Blanchard, Management, p. 77.

[16]Robert R. Blake, and Jane Srygley Mouton, Corporate Excellence Through Grid Organization Development (Houston, Texas: Gulf Publishing Company, 1968).

[17]Hersey & Blanchard, Management, pp.46-48.

as holding negative views of workers. They are seen as disliking work, having little ambition and wanting to be directed. It is assumed that they have very little capacity for solving organizational problems, and must be closely controlled and even coerced to achieve whatever objectives the manager proposes.

Based on ten years of experience in a variety of Security Police Organizations and innumerable hours of discussions, the author feels that this describes accurately the majority of the mid-level Air Force Security Police supervisors and a sizeable proportion of higher level supervisors. This has always been a problem in the Security Police, but it has become of even greater concern with the advent of the "All Volunteer Force". There is a tremendous turnover in the lower-ranking personnel each year. While this is not due entirely to the style of management practiced in the various units, management style is a large part of the problem. The younger Airman, coming into the Air Force and the Security Police, is better educated and much more sophisticated than prior enlistees. He is, as Philip Slater put it, "a product of the counter-culture;"[18] having been brought up in a time when values were questioned and the "whys" of a situation were demanded. If the Air Force is to retain a larger percentage of these highly-qualified young men, there is going to have to be a movement toward involvement at all levels. Certainly,

---

[18]Philip Slater, The Pursuit of Loneliness (Boston: Beacon Press, 1976) p. 105-129.

there will have to be basic "givens" such as instant obedience in crisis sutations. Yet, participation seems to be the most logical direction that will have to be pursued. The specific benefits that would result are numerous. Communication would improve tremendously; there would be a free flow of ideas up, down and laterally between all segments of the hierarchy. This would tap a previously unused reservoir of potential talent - the lower level employee. Since goals would be arrived at mutually, they would have a commitment unattainable in an authoritarian system. Increased trust would exist between managers and employees, resulting in a greater unit of purpose. Very little covert resistance to goals would exist and since the informal organization would overlap, the formal one, harmony would pervade the organization.

Douglas McGregor, one of the giants of management training, calls unequivocally for a shift to the participative style - his "Theory Y"[19]. McGregor has proposed that in order to deal with the individual in an organization today, vastly different ideas must be entertained. His construct of management theory is basically that:

> 1. Management is responsible for organizing the elements of productive enterprise - money, materials, equipment, people - in the interest of economic ends.

---

[19]Douglas McGregor, The Human Side of Enterprise (School of Industrial Management, Massachusetts Institute of Technology), pp. 1-2. This is extracted from a paper based on an address by Dr. McGregor before the Fifth Anniversary Convocation of the M.I.T. School of Industrial Management.

> 2. People are not by nature passive or resistant to organizational needs. They have become so as a result of experience in organizations.
>
> 3. The motivation, the potential for development, the capacity for assuming responsibility, the readiness to direct behavior toward organizational goals are all present in people. Management does not put them there. It is a responsibility of management to make it possible for people to recognize and develop these human characteristics for themselves.
>
> 4. The essential task for management is to arrange organizational conditions and methods of operation so that people can achieve their own goals best by directing their own efforts toward organizational objectives.

Much of McGregor's theory is based on Maslow's concept of self-actualization, i.e., work can be enjoyable and people will work hard and assume responsibility if they have the opportunity to satisfy their personal needs while at the same time achieving organizational goals. Thus, there is no sharp division between elites (leaders) and the masses (followers).

> On the contrary, the autocratic leader underutilizes his people. They have a great deal more ability and potential for imagination and creativity than he gives them credit for. Given the proper conditions, individuals really do want to do a good job and will work hard to do so; their performance will be based on internal rather than external controls.[20]

Considerable research has been conducted to examine these concepts and their validity. Three experiments are most pertinent to this thesis.

---

[20] Huse & Bowditch, Behavior, p. 150.

The first, by Morse and Reimer,[21] concerned the relationship between level of decision making in an organization and the effectiveness of work performance. The sample included four parallel divisions (about 500 employees) of a large business firm, all performing similar work under similar conditions. The experimental changes involved policy clarification and change, training of individual supervisors and employees and alteration of certain organizational structures and processes. These actions were intended to produce contrasting effects on the independent variable, and measurements were obtained to confirm the success of the change program. Dependent variables included internal organizational processes as well as outputs such as cost of production and member satisfaction. The results were that increasing the amount of involvement in decision making by rank and file employees led to reduced cost of work performance, increased employee satisfaction, and increased sense of responsibility for work performance. Increasing the amount of involvement in decision making by higher level staff and supervisors also reduced cost of work performance, but otherwise led to reduced employee satisfaction, a lowering of individual responsibility for production, and other similar changes.

---

[21] N. Morse, and E. Reimer, "The Experimental Change of a Major Organizational Variable," Journal of Abnormal and Social Psychology, 52 (January, 1956) 120-129, as quoted in Stanley E. Seashore, "Field Experiments with Formal Organizations", in Studies on Behavior in Organizations: A Research Symposium, ed. Raymond V. Bowers (Athens, Georgia: University of Georgia Press, 1966) p. 90.

In the second example, by Likert and Hayes,[22] feedback of employee attitude survey data was used as a means for inducing beneficial changes in the attitudes and morale of employees. The sample included six departments (about 1000 employees) of the accounting division of a large utility firm. The experimental change program was a combination of natural and purposeful procedures. The managers and supervisors received coaching and counseling in feedback procedures, and encouragement toward extensive and intensive use of the process. The independent variable was the amount of feedback activity over a one year span of time and the dependent variables represented numerous aspects of employee satisfaction and morale treated separately and also summed to obtain an overall index of attitudes favorable to the achievement of the organization's goals. The results indicated that the amount of the improvements in employee attitudes and morale were roughly proportional to the amount of effort allocated to the feedback process.

Likert[23] studied the induction of change in four variables central to his management theory and the consequences with respect to "output" criteria of work efficiency, waste, absence, and employee satisfaction. The sample included

---

[22]Rensis Likert and S.P. Hayes, Jr. (eds) Some Applications of Behavioral Research (Paris: UNESCO, 1957) as quoted in Seashore, "Field Experiments", p. 91.

[23]Likert, New Patterns, as quoted in Seashore, "Field Experiments", p. 92.

five production departments (about 500 employees) of a packaging materials firm. The change program was intended to induce in the experimental units: (a) more employee involvement in decision making, (b) more use of work groups as a medium for organizational activity, (c) more supportiveness in supervisor - employee relationships, and (d) more mutual interaction and influence within work groups. The results indicated that changes in the four independent variables were associated with increased employee satisfaction, reduction in waste, increase in productive efficiency and dampening of a trend toward increased absenteeism.

This review has been limited to those areas that directly relate management style to employee effectiveness. Unfortunately, the published information in this area deals exclusively with private industry, with a production orientation. This thesis is an attempt to examine the validity of modern management concepts within the context of a fovernment organization and within a service mode -- the Air Force Security Police.

CHAPTER II

THE RESEARCH DESIGN & METHODOLOGY

The author's experience dictated several assumptions. One, that different styles of management exist within the Air Force Security Police. These extend on a continuum from Totally Authoritarian to Totally Participative, and all shades in between. The second was that Participative - Authoritarian styles represent productive vs. counterproductive approaches, respectively.

Based upon these assumptions, the research hypothesis tested in this study was:

> Participative management styles as compared to Authoritarian styles increase employee effectiveness within U.S. Air Force Security Police Squadrons.

Participative management as defined by Likert[1] is one in which several factors exist. Supervisors have complete confidence and trust in subordinates. Motivation is intrinsic in that personnel set goals, improve methods, etc. and feel real responsibility for organization's goals. Communication is total -- up, down, and laterally -- and it is accurate, generally accepted and open to questions if needed. Decision making authority is dispersed throughout the organization. Widespread responsibility exists for

---

[1]Rensis Likert, The Human Organization: Its Management and Value, (New York: McGraw-Hill Book Co., 1967) pp. 4-10.

review and control and is used for self-guidance and problem solving, not punitive measures. Finally, the formal and informal organization are one and the same.

Authoritative management also defined by Likert[2], is the situation in which: Little trust or openness between managers and workers exists. Motivation is essentially negative - fear, threats, punishment and occasional rewards are predominant. Decision-making and goal-setting are top management functions. Communication is a downward directed function and is viewed with suspicion by subordinates. Very little cooperative teamwork exists. Control is totally concentrated in the hand of top management. Control data is used as a punitive device to control production. An informal organization exists and opposes the goals of the formal organization.

Thus, the independent variable in this design was Management Style, with two attributes, "Tending toward Authoritarian" and "Tending toward Participative"; as measured by mean scores on a questionnaire. (See Appendix 1). Each item dealt with the predominant style of the individual respondent. For example,

How much confidence do you have in your subordinates	No Confidence————	Total Confidence
How much covert resistance to goals is present among the troops?	Little or None————	Strong Resistance

---

[2]Ibid.

The dependent variable was "Employee Effectiveness." This was defined and measured by objective data collected from personnel records. Several of these indicators of effectiveness were: "Letters of Reprimand","Letters of Counseling", and "Letters of Appreciation" contained in an individual's record.

The basic design of the study was a Post Hoc Experiental one; the questionnaire identification of two "types" of managers and supervisors, and a measurement of the impact of their styles upon those whom they supervised, made by means of existing records.

METHODOLOGY

Time and money limitations restricted the research to the Security Police units at the five Air Force bases within reach of Sacramento. Prior to contact being made with these units, the questionnaire was developed. Initially, the Likert "Profile of Organizational Characteristics"[3] was examined as a possible useful survey that could be used to measure managerial styles on an authoritarian-participative continuum. Likert, however, divided the respondents into four categories -- Exploitative Authoritative, Benevolent Authoritative, Consultative, and Participative -- with the break between Authoritative and Participative somewhere in the Consultative group. Due an uncertain sample

---

[3]Ibid., pp. 196-211.

size, and for analytic purposes, it was felt that four categories were too many. Instead, items utilizing a bipolar, equal interval scale were constructed. For example, "How much confidence do you have in your subordinates?" "No confidence"————————"Total Confidence". Eighteen questions either were developed originally or modified from Likert's survey. One question was subdivided into five parts. Thus, 22 responses were possible from each respondent. The survey itself was divided into two parts. First, the respondent was asked to rate the unit and himself in terms of "existing" situation. Second, the respondent was asked to rate the unit and himself as he "desired" the situation to be.

The survey was pretested by administering it to sixteen subjects. They consisted of five U.S. Air Force Security Police officers and eleven other Air Force officers in a variety of specialties. All of the pretest subjects were interviewed in depth, and suggestions were solicited to improve the survey instrument. The responses indicated several changes were necessary. For example, initially, to avoid any sort of a mental set, the order of the continua of responses was reversed, such as in Question 4, "never" would preceed "always" in (a), but would be reversed in (b) to "always", "never". This proved to be a problem in that many rating instruments that the Air Force utilizes for a variety of functions all proceed from left to right with the extreme

right scores possessing the maximum of the attribute measured. Therefore, the order of presentation of several questions was reversed. Also, several minor changes were made in the graphic presentation of the questions in order to make them more readable and easier to understand.

At this point, personal contact was made with the Chiefs of the Security Police units that were to provide the experimental subjects. All five Chiefs indicated their complete cooperation and support for the project.

The next step was to define operationally "employee effectiveness" for purpose of the survey. This proved to be a most difficult step. For convenience, Mather AFB's Security Police Squadron was used for the preliminary research to define various indicators of effectiveness. All the various records maintained on the personnel in the squadron were reviewed, with the exception of the Master Personnel Record Group. From this review, a series of nineteen indicators of "effectiveness" were developed. Based on these, there was a dearth of "positive" indicators. Eighteen of the indicators were "negative". A worksheet was developed listing all of them. This was examined by several other Security Police officers to determine if any had been overlooked. An additional category was added by this process. (See Appendix 2 for the final document.)

These nineteen indicators bear some explanation. "Counseling Forms" covered a multitude of sins -- from lack of a haircut, to AWOL (Absent Without Leave). "Letters of

Reprimand", the next category, is part of the disciplinary escalation process. While the "Letter of Counseling" or Counseling Forms were normally written by a person's supervisor, "Letters of Reprimand" originated with the Commander and were made a part of the permanent record. "Incident Reports" again covered a variety of offenses. "Incidents" were serious enough that they became a police problem and patrols were dispatched to deal with them. Examples were off-duty fights, or an on-duty offense, such as an unauthorized discharge of a weapon. "Missed Appointments" is a self-explanatory category. Due to the large number of personnel missing various types of appointments and receiving subsequent informal counseling, the category was added. "Article 15's" are Non Judicial punishments administered under Article 15 of the Uniform Code of Military Justice. Under this article an Airman may be fined, reduced in rank, given extra duty, or similar sentence. "Control Roster Action", the next category, is considered to be a negative indicator also. This normally involves a 90-day period of close observation, due to some deficiency in performance, after which a man is given a special performance report. "Disqualification from Security Police Duties" is self-explanatory. The "Accident" category included on duty incidents with goverment vehicles as well as those off duty, in privately-owned vehicles. "Letters of Appreciation" are self-explanatory. The following six categories are merely different levels of a personnel award program: Airman of the Month, of the Quarter, and of the Year; NCO of the Month, of the Quarter,and of the Year."

"Reenlistments" are self-explanatory. "Volume Test" referred to the test scores obtained by individuals in various levels of upgrade training. The final category included "Airman Performance Reports", (APRs) by means of which each person's on the job performance is rated numerically. The categories of Airman of the Month through APRs were eliminated due to a non existant or very low "N".

Concurrent with the development of the worksheet, approval from Headquarters USAF was solicited for permission to use the survey instrument. Once approval was granted, the next step in the process took place. All five bases in Northern California were visited and the data recorded. The five bases were Beale AFB near Marysville; Castle AFB near Merced; Travis AFB near Fairfield and Mather and McClellan AFBs in Sacramento.

Three sets of records on each base were reviewed. First were the records maintained by the Flight Chiefs (a flight is equivalent to a watch in a civilian police agency). These normally contained the majority of the data available. Next, were the overall Squadron Records maintained in the orderly rooms. These normally were in two sets. One consisted of the Unfavorable Information File which contained Letters of Reprimand, Article 15's, Control Roster Actions, and finally, Courts Martial records. The second set were the overall personnel actions recorded on an individual. These contained the remainder of the data recorded in neither of the other files

All the available data was recorded by flight and by administrative branch on non-flight personnel. After preliminary examination of the branch's records, it was determined that the number of non-flight individuals was too small to give any kind of meaningful results; anywhere from 1 man to a 5 man office. Therefore, the non-flight branches were excluded from the survey sample. In all, 714 records were reviewed on flight personnel.

Once all the data on the personnel was recorded, the survey was administered to all personnel down to the Flight Chief level who supervised the people on whom "effectiveness" data had been collected. It was felt that to go any lower would not be worthwhile since the dominant management style of the Flight Chief would prevail at lower levels of supervision. At this point in the survey, a revision in the original design had to be made. It had been originally planned that the survey would be administered to Chiefs of Security Police, Operations Officers, and Officers in Charge (OICs) and Non-Commissioned Officers in Charge (NCOICs) of the various branches, i.e., Law Enforcement, Weapon Systems Security, Military Working Dog Section, etc. However, a realignment of the chain of command in the squadrons had occurred. All OIC and NCOIC's positions had been eliminated in the larger units. Additional officers were assigned, so that there was an officer as a shift supervisor on each flight, 24 hours a day. This eliminated a number of NCOs on each base from the management chain, placing them in a staff

advisory function, reporting to and working through the Operations Officer. The scope of the survey was thus reduced from an anticipated minimum of 90 available supervisors to approximately 60 positions that would qualify as managers or supervisors of any sizable sub-unit. The actual maximum was 56 and of that number, 52 supervisors took the survey.

The surveys then were scored and the numeric values of one through eight were assigned to the responses. Questions 1, 2, 3, 4d, 4e, 5-14 were scored left to right. Questions 4a, 4b, 4c and 15-18 were scored right to left. (See Appendix 3.) Two scores then were obtained for each of the 52 respondents. One, a mean ($\bar{X}$) of the 22 "is now" responses. Second, a mean of the "should be" ratings.

The data from the surveys were rank ordered on both "existing" and "desired situations" and the mean for each set of means was calculated. The mean for the "existing situation" was then used as the dividing point between the two attributes, "Tending towards Authoritarian" and "Tending towards Participative." Indicators of effectiveness were tabulated for those flights which fell into each of the attributes

The statistical analyses conducted, and the obtained results are reported in the following chapter.

CHAPTER III

RESULTS

The basic results of this study are somewhat ambiguous. It had been anticipated that the Mean Questionnaire scores would range from very low, indicating an authoritarian management style, to very high, descriptive of a participative style. However, as evidenced by Table 1, the means for "existing" data ranged from 4.41 to 7.16; from slightly below the midpoint to very high. Thus, they were heavily weighted to the participative end. This could have been due to several factors. Recently the Air Force, has provided some supervisors with human relations training, including some of those surveyed. This could have resulted in a weighting of the scores toward the participative end of the continuum. Secondly, several survey items, though unbiased, were transparent. That is, an intelligent respondent (especially one who had been exposed to current management training) could identify the "participative" responses as being "better" than authoritarian ones. This could have allowed some respondents to "fake good" on the survey despite authoritarian managerial behavior with subordinates. To the extent that this occured, the questionnaire's validity is questionable.

TABLE 1

RANK ORDERING OF "EXISTING" AND "DESIRED" INDIVIDUAL MEANS

(Each Mean summarizes the 22 Questionnaire responses of a given individual.)

EXISTING		DESIRED	
4.41	5.36	4.68	7.00
4.41	5.36	5.40	7.00
4.45	5.36	5.90	7.09
4.59	5.41	6.05	7.09
4.63	5.45	6.09	7.09
4.64	5.50	6.32	7.14
4.64	5.55	6.34	7.14
4.68	5.55	6.41	7.14
4.77	5.55	6.41	7.16
4.77	5.59	6.50	7.18
4.77	5.64	6.59	7.18
4.77	5.64	6.61	7.18
4.82	5.68	6.68	7.23
4.86	5.73	6.68	7.30
4.91	5.90	6.68	7.32
4.95	5.91	6.70	7.36
4.98	5.95	6.73	7.36
5.00	6.05	6.75	7.36
5.05	6.09	6.77	7.41
5.18	6.18	6.77	7.41
5.18	6.41	6.77	7.41
5.27	6.73	6.82	7.59
5.27	6.75	6.82	7.64
5.32	7.16	6.82	7.84
5.32	Σ=278.14	6.91	Σ=356.63
5.32	N=52	6.91	N=52
5.32	$\bar{X}$=5.35	6.95	$\bar{X}$=6.85
5.36	σ =.61	6.95	σ =.55

Since no natural dichotomy could be ascertained, the ranked means were divided at their mean of 5.35 which approximated the median of 5.32. The independent variable data thus were divided arbitrarily into "low" and "high" categories, and these were termed "Tending toward Authoritarian" and "Tending toward Participative". (See Table 2.)

Utilizing these two categories, the dependent variable data were divided into the two respective groups for the statistical test of the primary hypothesis.

The original 19 indicators of effectiveness were initially collapsed to six due to the low "N" in the remaining categories. Of the six categories remaining, only "Letters of Appreciation" was a positive indicator. The remaining five were negative in nature.

Utilizing the six categories, a 2x6 Chi Square table was constructed with df=5 (see Table 3). Though all of the Differences were in the hypothesized direction, they were each too msall to result in a significant Chi Square value. A 2x2 Chi Square table was then constructed combining all five negative indicators into a single category. The calculated value of Chi Square was once again not significant due to the very small difference in proportions on the positive indicators. (See Table 4.) At this point, the positive data category was eliminated and a 2x1 Chi Square table was constructed to test the "goodness of fit" of the negative data. The positive category was eliminated due to

TABLE 2

RANK ORDERING OF DATA BY INDEPENDENT VARIABLE CATEGORY

Tending Toward Authoritarian

Existing Score	Desired Score	D	D^2
4.41	6.41	-2.00	4.00
4.41	6.82	-2.41	5.81
4.45	6.73	-2.28	5.20
4.59	6.95	-2.36	5.57
4.63	7.41	-2.78	7.73
4.64	7.41	-2.77	7.67
4.64	4.68	-0.04	0.0016
4.68	7.09	-2.41	5.81
4.77	6.05	-1.28	1.64
4.77	5.40	-0.63	0.397
4.77	6.32	-1.55	2.40
4.77	7.14	-2.37	5.62
4.82	5.90	-1.08	1.17
4.86	6.09	-1.23	1.51
4.91	7.00	-2.09	4.37
4.95	6.41	-1.46	2.13
4.98	6.75	-1.77	3.13
5.00	6.82	-1.82	3.31
5.05	6.77	-1.72	2.96
5.18	7.09	-1.91	3.65
5.18	6.77	-1.59	2.53
5.27	6.68	-1.41	1.99
5.27	6.68	-1.41	1.99
5.32	6.59	-1.27	1.61
5.32	7.59	-2.27	5.15
5.32	6.58	-1.26	1.59
5.32	6.34	-1.02	1.04
Σ =132.28	Σ =178.47	Σ =-46.19	Σ =89.97
N = 27	N = 27	N = 27	
$\bar{X}$ = 4.90	$\bar{X}$ = 6.61	$\bar{X}$ =- 1.71	
σ = .29	σ = .61	σ = .64	

TABLE 2
cont.

RANK ORDERING OF DATA BY INDEPENDENT VARIABLE CATEGORY

Tending Toward Participative

Existing Score	Desired Score	D	D^2
5.36	7.16	-1.80	3.24
5.36	6.95	-1.59	2.53
5.36	7.41	-2.05	4.20
5.36	6.50	-1.14	1.30
5.41	7.18	-1.77	3.13
5.45	7.00	-1.55	2.40
5.50	7.36	-1.86	3.45
5.55	7.23	-1.68	2.82
5.55	6.91	-1.36	1.85
5.55	6.61	-1.06	1.12
5.59	6.82	-1.23	1.51
5.64	7.09	-1.45	2.10
5.64	7.18	-1.54	2.37
5.68	7.14	-1.46	2.13
5.73	6.91	-1.18	1.39
5.90	7.30	-1.40	1.96
5.91	7.36	-1.45	2.10
5.95	7.18	-1.23	1.51
6.05	7.14	-1.09	1.19
6.09	6.77	-0.68	0.46
6.18	7.32	-1.14	1.30
6.41	7.36	-0.95	0.90
6.73	7.64	-0.91	0.83
6.75	6.70	-0.05	0.0025
7.16	7.84	-0.68	0.46
$\sum$ =145.86	$\sum$ =178.06	$\sum$ =-32.30	$\sum$ =46.25
N = 25	N = 25	N = 25	
$\bar{X}$ = 5.83	$\bar{X}$ = 7.12	$\bar{X}$ =- 1.29	
σ = .48	σ = .30	σ = .43	

t Test For Paired Means

Tending Toward Authoritarian	Tending Toward Participative
t = 13.79	t = 2.798
df = 26	df = 24
Significant at .001 level	Significant at .01 level

t Test Between D Scores

t = 2.75
df = 50
Significant at .05 level

TABLE 3

2x6 CHI SQUARE TABLE

	Tending Toward Authoritarian	Tending Toward Participative	
Letters of Counseling	265 (261)	210 (214)	475
Letters of Reprimand	90 (84)	63 (69)	153
Article 15s	34 (36)	31 (29)	65
Control Roster	12 (11)	8 (9)	20
Disqualified from S.P. Duties	13 (13)	10 (10)	23
Letters of Appreciation	50 (52)	44 (42)	94
	464	366	830

$\chi^2 = 1.71$

df=5

Not Significant

TABLE 4

2x2 CHI SQUARE TABLE

	Tending Toward Authoritarian	Tending Toward Participative	
Negative Indicators of Effectiveness	414 (404)	322 (332)	736
Positive Indicators of Effectiveness	50 (52)	44 (42)	94
	464	366	830

$\chi^2 = .720$
df=1
Not Significant

TABLE 5

2x1 CHI SQUARE TABLE

	Tending Toward Authoritarian	Tending Toward Participative	
Negative Indicators of Effectiveness	414 (404.8)	322 (331.2)	736

$\chi^2 = .548$
df=1*
Not Significant

*The df for a 2x1 table is always equal to 1. N. M. Downie and R.W. Heath, Basic Statistical Methods (Third Edition) (New York: Harper & Row, Publishers, 1970) p. 200.

the possibility that the one indicator "Letters of Appreciation" was questionable.

The 27 managers who fell in the Tending toward Authoritarian category supervised 55% of the 714 total personnel in the sample; 55% of the negative indicators of effectiveness equaled 404.8 as the expected frequency for this category. Tending to Participative contained 45% of the total personnel supervised; 45% of the negative indicators equaled 331.2 as the expected frequency. Chi square was then calculated and was not significant. (See Table 5) Chi square equals .548; df=1.

The rank ordered "existing" data was then paired with the corresponding "desired" data (see Table 2) and a further analysis was performed. The working hypothesis for this stage was that the difference between "existing" and "desired" situation for the Participative group would be greater than the Authoritarian group. Expected additionally, was that the "Participatory" Difference scores would be skewed more to the high end of the scale. A "t" test for paired data was thus computed (see Table 2). The "existing" and "desired" scores for the Authoritarian group were compared and the difference proved to be significant at the .001 level. The same analysis was computed for the Participative data; this was also significant at the .01 level. A third "t" test between the difference scores ("D") was computed and also proved significant at the .05 level.

The next procedure was a calculation of a "t" test between "D" scores for both categories. This yielded a "t" of 2.749 with df=50, significant at the .05 level. (Table 2) However, this significance would seem to indicate a greater degree of dissatisfaction on the part of those in the Authoritarian Group, even though their "Desired" level of management is lower than for the Participative Group. The "D" score for the Participative Group was smaller than the Authoritarian Group. This would tend to support a contention that the Participative Group see themselves as participative and as functioning closer to the desired optimum, even though the latter is "higher" than for the Authoritarian Group. The Authoritarian Group, on the other hand, see themselves as less participative but in actuality desire a more participative situation than exists. Once again, a readiness seems to exist for a move to more participative management at all levels.

A further analysis was suggested in a rank ordering of the scores based on years of service. (See Table 6.) The scores were divided at a break point of 14 years. This break point was suggested by a number of subjective experiences of the researcher over a period of time. It seemed that those individuals with more service appeared to have a more authoritarian orientation than those with proportionately lesser service. The break point for the division of years of service at 14 years was made for a number of

TABLE 6

RANK ORDERING OF DATA BY YEARS OF SERVICE

Yrs.	Perceived	Desired	Yrs.	Perceived	Desired
29	6.41	7.36	14	5.32	6.59
22	5.50	7.36	14	6.73	7.64
22	6.18	7.32	13.5	5.91	7.36
22	6.09	6.77	13	5.32	6.68
20	5.55	6.91	13	4.96	6.09
20	4.77	6.05	13	7.16	7.84
19	5.64	7.18	13	5.73	6.91
19	4.82	5.90	13	6.75	6.70
18	5.36	6.95	12	5.55	7.23
18	5.18	6.77	12	5.27	6.68
18	4.64	7.41	12	4.68	7.09
18	5.36	7.16	11	5.32	6.34
18	5.36	6.50	11	5.64	7.09
18	4.77	5.40	11	5.95	7.18
17	5.32	7.59	9	5.00	6.82
17	4.63	7.41	9	4.98	6.75
17	4.64	4.68	8.5	5.45	7.00
17	4.41	6.41	8	4.77	6.32
			8	5.36	7.41
			7.5	5.90	7.30
			7	5.61	6.66
			7	6.05	7.14
			7	5.59	6.82
			6.5	4.59	6.95
			6.5	5.41	7.18
			6	5.05	6.77
			5.5	5.18	7.09
			2	4.91	7.00
			1	4.41	6.82
	Σ=94.63	121.13		Σ=158.45	201.45
	N=18	18		N=29	29
	$\bar{X}$=5.26	6.73		$\bar{X}$=5.46	6.95
	σ =.55	.76		σ =.67	.31

t tests

Desired vs. Desired	Existing vs. Existing
t=1.138	t=1.08
df=45	df=45
Not Significant	Not Significant

reasons. One, there was an obvious three year gap between 14 and 17 years of service. Secondly, the 14 year point is very roughly the start of the Viet Nam Era, which has produced a markedly different type of individual, more willing to question the "status quo". Thus, it was felt that these two groups should have a difference in existing and desired management scores. As it developed, no significant difference between year groups could be determined. "t" = 1.08; df=45. Neither was the same comparison for the two categories of "desired" scores significant. (t=1.138; df=45.) Thus, no difference between year groups could be substantiated.

At this point,an additional display of subgroup data is in order (see Table 7). Several calculations were based upon the data displayed in Table 9, so it is of some special significance.

Analyses were run on a variety of subgroups to determine if comparisons among the latter would result in statistical significance. Based on the new chain of command in the larger units, an analysis was run between the officers in the overhead positions, i.e., the Chiefs of Security Police (CSPs) and the Operations Officers, and those serving as Officer Shift Supervisors OSS's) on Flight duty. "t" tests were run comparing "existing" and "desired" scores in both categories of officers. (See Table 8.) Neither comparison was significant. (t= 1.62; df=16 for "Existing" vs. "Existing" data) (t=.40; df=16 for "Desired" vs. "Desired" data.)

TABLE 7

MEAN QUESTIONNAIRE SCORES BY DESIGNATED SUB GROUPS

Chiefs of Security Police	Operations Officers	Shift Supervisors	NCOICs	Law Enforcement Flight Chiefs	Security Flight Chiefs
5.55-7.23	5.59-6.82	5.27-6.68	6.41-7.36	4.77-5.40	4.63-7.41
6.75-6.70	4.77-6.05	4.41-6.82	5.55-6.91	5.36-7.41	5.36-6.50
5.73-6.91	5.64-7.09	5.27-6.68	5.61-6.61	4.59-6.95	4.82-5.90
7.16-7.84	5.68-7.14	4.68-7.09	$\bar{X}$=5.86-6.96	4.64-4.68	4.64-7.41
5.32-6.34	5.95-7.18	4.91-7.00		4.45-6.73	6.18-7.32
$\bar{X}$ =6.10-7.00	5.53-6.86	5.00-6.82		5.90-7.30	4.41-6.41
		5.45-7.00		4.95-6.41	5.91-7.36
		6.05-7.14		5.18-7.09	5.18-6.77
		6.73-7.64		4.77-7.14	6.09-6.77
		5.05-6.77		4.98-6.75	$\bar{X}$=5.25-6.87
		$\bar{X}$=5.28-6.96		5.50-7.36	
				4.77-6.32	
				5.64-7.18	
				4.86-6.09	
				5.36-7.16	
				5.32-6.59	
				5.41-7.18	
				5.32-6.95	
				5.32-7.59	
				5.32-6.68	
				$\bar{X}$=5.19-6.75	

TABLE 8

COMPARISON OF OFFICERS; FLIGHT VS. OVERHEAD

Overhead	Flight
7.16-7.84	5.27-6.68
5.73-6.91	4.41-6.82
6.75-6.70	5.00-6.82
5.55-7.23	4.91-7.00
5.59-6.82	4.68-7.09
4.77-6.05	5.05-6.77
5.95-7.18	6.73-7.64
5.32-6.34	6.05-7.14
5.64-7.09	5.45-7.00
$\bar{X}$=5.83-6.91	$\bar{X}$=5.28-7.00
N=9	N=9
σ =.68 .57	σ =.68 .27

---

t tests

Existing vs. Existing	Desired vs. Desired
t=1.62	t=.40
df=16	df=16
Not Significant	Not Significant

TABLE 8

COMPARISON OF OFFICERS; FLIGHT VS. OVERHEAD

Overhead	Flight
7.16-7.84	5.27-6.68
5.73-6.91	4.41-6.82
6.75-6.70	5.00-6.82
5.55-7.23	4.91-7.00
5.59-6.82	4.68-7.09
4.77-6.05	5.05-6.77
5.95-7.18	6.73-7.64
5.32-6.34	6.05-7.14
5.64-7.09	5.45-7.00
$\bar{X}$=5.83-6.91	$\bar{X}$=5.28-7.00
N=9	N=9
σ =.68 .57	σ =.68 .27

---

t tests

Existing vs. Existing	Desired vs. Desired
t=1.62	t=.40
df=16	df=16
Not Significant	Not Significant

Non-Commissioned Officers (NCOs) were compared, also, by dividing the group into the two major specialties existing in Security Police - Law Enforcement and Security. Based on the different demands of the jobs they represent, it was hypothecized that the NCOs in Security would tend to be more authoritarian and differ significantly from the Law Enforcement NCOs who would tend to be more participative. As is evident from the data, the mean score for the perceived score in both cases is identical. The desired scores differ by only .06. The differences appear to be meaningless and when "t" was calculated for the "existing" data, the result was 0. The desired data yielded a $t = .257$; $df=27$. Once again, not significant. (See Table 9.)

Logically, the next step was to compare officers and NCOs overall. This was done and a non-significant "t" of 1.44 with df of 45 resulted for "existing" data and "t" of .691 with df of 45 for "desired" data, also not significant.

A further analysis was explored to eliminate the mid-range. Chiefs of Security Police were compared with Law Enforcement Flight Chiefs and Security Flight Chiefs (see Table 11). These were the extremes of the management chain - top and bottom level. Calculations I and II between "existing" scores for CSPs and Law Enforcement and CSPs and Security both indicated a significant difference. However, the "desired" scores analyses resulted in no significant differences.

Table 12 displays the "desired" situation in order, NCOIC's through Law Enforcement Flights.

TABLE 9

COMPARISON OF NCO'S BY SPECIALTY

Security	Law Enforcement
5.91-7.36	5.41-7.80
5.18-6.77	5.36-6.95
6.09-6.77	5.32-7.59
4.64-7.41	5.32-6.68
6.18-7.32	4.86-6.09
4.41-6.41	5.36-7.16
4.63-7.41	5.32-6.59
5.36-6.50	5.50-7.36
4.82-5.90	4.77-6.32
5.61-6.61	5.64-7.18
$\bar{X}$=5.28-6.95	5.90-7.30
N=10	5.18-7.09
σ =.62 .49	4.98-6.75
	6.41-7.36
	5.55-6.91
	5.36-7.41
	4.59-6.95
	4.77-5.40
	4.64-4.68
	$\bar{X}$=5.28-6.79
	N=19
	σ =.43 .71

t tests

Existing vs. Existing	Desired vs. Desired
t=0	t=.257
Not Significant	df=27
	Not Significant

TABLE 10

OFFICER AND NCO DATA RANKED BY YEARS OF SERVICE

Yrs	Perceived	Desired	Yrs	Perceived	Desired
20	4.77	6.05	29	6.41	7.36
14	6.73	7.64	22	5.50	7.36
13	7.16	7.84	22	6.18	7.32
13	5.73	6.91	22	6.09	6.77
13	6.75	6.70	20	5.55	6.91
12	5.55	7.23	19	5.64	7.18
12	5.27	6.68	19	4.82	5.90
12	4.68	7.09	18	5.36	6.95
11	5.32	6.34	18	5.18	6.77
11	5.64	7.09	18	4.64	7.41
11	5.95	7.18	18	5.36	7.16
9	5.00	6.82	18	5.36	6.50
8.5	5.45	7.00	18	4.77	5.40
7	6.05	7.14	17	5.32	7.59
7	5.59	6.82	17	4.63	7.41
6	5.05	6.77	17	4.64	4.68
2	4.91	7.00	17	4.41	6.41
1	4.41	6.82	14	5.32	6.59
			13.5	5.91	7.36
	$\bar{X}$=5.56	6.95	13	5.32	6.68
	N=18		13	4.86	6.09
	σ = .70	.34	9	4.98	6.75
			8	4.77	6.32
			8	5.36	7.41
			7.5	5.90	7.30
			7	5.61	6.61
			6.5	4.59	6.95
			6.5	5.41	7.18
			5.5	5.18	7.09
				$\bar{X}$=5.28	=6.81
				N=29	
				σ = .51	.98

"t" Tests

Existing vs. Existing
t = 1.439
df = 45
Not Significant

Desired vs. Desired
t = .691
df = 45
Not Significant

TABLE 11

COMPARISON OF CHIEFS OF SECURITY POLICE & FLIGHT CHIEFS

CSPs Perceived	CSPs Desired	L.E. Flight Chiefs Perceived	L.E. Flight Chiefs Desired	Security Flight Chiefs Perceived	Security Flight Chiefs Desired
$\bar{X}$ = 6.10	7.00	$\bar{X}$ = 5.19	6.75	$\bar{X}$ = 5.25	6.87
σ = .72	.51	σ = .43	.71	σ = .62	.49

I	II
Perceived CSP v. L.E. Flight Chief	Perceived CSP v. Security Flight Chiefs
t = 2.44	t = 4.78
df = 22	df = 13
Significant @.05	Significant @.01

III	IV
Desired CSP v. L.E. Flight Chief	Desired CSP v. Security Flight Chiefs
t = .820	t = .422
df = 22	df = 13
Not Significant	Not Significant

TABLE 12

DESIRED SITUATION

NCOICs	7.14
Chiefs Security Police	7.00
Officer Shift Supervisor	6.96
Security Flights	6.87
Operations Officers	6.86
Law Enforcement Flights	6.75

CHAPTER IV

DISCUSSION

The basic hypothesis of participative management style resulting in significantly improved effectiveness was not supported by the study. One major limitation of the study appeared to be the transparent questionnaire. Several supervisors, responding to the survey, gave a response that they felt the author wanted. Thus, rather than an accurate picture of their management style, an artificial situation was depicted. One concrete example concerned a Master Sergeant who scored 6.09 on "Existing" data, well up in the participative group. In an informal interview after the test, he indicated that he felt that the whole human relations approach and participative management "was a lot of bunk". The only way to motivate a man was through "fear". If a man was afraid of doing a poor job because of the consequences that would result, then all was well. He stated "Fear was the greatest motivator in the world."

Another individual, a Technical Sergeant, displayed a similar attitude. He stated that he hit a new man on his flight "hard and fast." "Burn him once early and he'll make a good worker." Yet, this individual scored 5.64

on "Existing" data; once again, well up into the participative group. This would tend to throw into question the validity of the questionnaire results. The indication is that the subjects were "test wise"; they have been subjected to so many survey instruments that they tend to feed back "good responses" rather than true ones

Another, related explanation is that the amount of management training that has been administered in recent years at all levels has resulted in an understanding (if not an implementation) of management concepts. This combined with the above postulated test-wise approach could have substantially undermined the Questionnaire's validity.

Of the original 19 indicators, only "Letters of Appreciation" could be considered a positive indicator. This situation exemplifies a long-standing tradition in the military, and makes an overall statement about management techniques. The management process is essentially negative. Almost no positive reenforcement is recorded. This does not necessarily mean that no positive reenforcement exists, but it is far out-weighed by the negative. Even Letters of Appreciation are extraneous, in that the vast majority of them came from outside the organization being examined, not from internal sources. If one merely uses the recorded data on a unit, it would seem that the majority of the time and effort of the supervisors is devoted toto handling the problems and infractions committed by a

small number of individuals. Little time appears to be devoted to the silent majority who attempt to do their job well, and as a consequence, receive very little recognition of support from supervisors. The process appears to be self-defeating with more and more effort put into "problem" airmen and not enough into the productive individual who carries two burdens -- his own and that of the poor performer

It was the case, that the means for the "Desired" scores were lower for the Authoritarian group than the Participative group. However, these scores were significantly higher than "Existing" scores for both groups . It could be proposed that the Authoritarian group (although they saw their situation as Tending toward Authoritarian end of the continuum) would still prefer to manage in a more participative manner. Something, however, holds them back -- possibly a hesitancy to try new methods or techniques; reluctance to step off into the unknown to relinquish some of the authority they have earned by going through the system. All of this would seem to indicate a potential, even a readiness, of the Authoritarian group, as well as the Participative group, to function in a more participative manner, if sufficient training and support were to be provided

Conversely, the "D" mean for the Participative

supervisors was smaller than that for the Authoritarians. Thus, the formers' style of management, as they perceived it, was much closer to their desired situation. Thus, the Participative group tended more to practice a style of management with which they were comfortable than the Authoritarian group. The key point appears to be the readiness factor. If, as it seems, the Authoritarian group is ready to explore the participative style, then great strides can be made in the near future.

Of the several further analyses run, several interesting facts surfaced. The "t" test between the officers in overhead positions vs. those in Flight, i.e., Shift Supervisor positions proved not to be significant. This would seem to indicate that the rank, not the position, would be related to management style. That is, due to the greater educational level and training, most officers would tend to be closely related on management styles, irrespective of the positions they occupy.

In the case of the comparison of the NCOs in Security and Law Enforcement, once again this would tend to indicate that the style is dependent on the rank and level rather than the job performed. See Table 11 based on the "t" test not being significant.

The results of the "t" test, comparing officers and NCOs overall showing no significance, would seem to be contrary to a main point of the thesis. That is, with additional management training, exposure to various methods, the individual

manager would tend toward the participative style of management. It would therefore follow that officers should be significantly more participative than NCOs. Although the mean scores are located more toward the Participative end for officers than NCOs, there is not enough of a difference to be significant. Possibly, this could be due to the large number of scores in the middle ranges, providing little possibility for significant outcomes with a small "N". (See Tables 12 and 9.)

The final statistical analysis, a "t" test between CSPs and Law Enforcement Flight Chiefs and Security Flight Chiefs, both proved to be significant. The combination of these events tend to show that while the CSPs perceive the management situation as more towards the Participative end at their level, the Flight Chiefs see it significantly more slanted to the Authoritarian end. Another interesting point is that all three groups desire much the same style of management. There is no significant difference in their mean scores. This would tend to indicate that although the situation, as it exists, is interpreted much differently, all three groups are remarkably close on what they see as a desirable management style.

Due to time constraints, a very important step in the index validation process had to be eliminated. This was an item analysis for internal validity of the survey itself. Each of the 22 possible responses should have been compared

to the overall score to see if the individual item accurately predicted the latter. If this analysis had been performed, it is possible that a sharper differentiation between categories of the independent variable might have resulted, despite the questionnaire's debatable validity. Consequent to this, the statistical analysis between various subgroups might have been more meaningful. The elimination of poor items from the survey might also have eliminated the bunching of the scores around the mean.

CONCLUSION

As has been mentioned, there was an extreme limitation of this study. Due to the restructuring of the Security Police Chain of Command, many potential respondents were eliminated from the sample. The low "N" weakened many of the analyses. If the line of questioning opened in this study is to be seen through to a legitimate conclusion, then the research would have to be expanded greatly. The Air Force could possibly benefit by administering a similar, but upgraded questionnaire to a larger "N". It is obvious, even from this small sample, that the supervisors, whether they fit into the category of Tending toward Authoritarian, or that of Tending toward Participative, all exhibit a strong trend toward a "Desired" situation more participative than currently exists. All of this clearly indicates a readiness on the part of the majority of the supervisors to attempt a more Participative

style of management, although there appears to be a reluctance and confusion on the part of some supervisors.

Niederhoffer[1], in Behind The Shield, describes a situation that closely parallels what is happening in the Air Force Security Police today, and is indicated by the results of the study at hand. Niederhoffer introduces Emile Durkheim's term "anomie" to the police management vocabulary. Anomie is defined as "a morbid condition of society characterized by the absence of standards, by apathy, confusion, frustration, alienation and despair."[2] While the situation is not quite that drastic, it bears exploring. As Neiderhoffer describes the conditions under which anomie occurs, the parallel becomes more evident. "Anomie occurs particularly when the old values of a social system are being supplanted by a new code."[3] This is particularly true in Air Force management techniques today. As some middle to higher-ranking officers attempt to institute a human relations approach, or more involvement in decision making, there is an opposing reaction on the part of others in the Security Police, i.e., "The authoritarian approach has worked in the past, so it will continue to work in the present and the future." As a result, the lower-ranking airman feels uncertain of his position based on the

---

[1]Arthur Niederhoffer, Behind The Shield: The Police in Urban Society (Garden City, N.Y.: Anchor Books, 1969) p. 95.

[2]Ibid.

[3]Ibid., p. 96.

conflict in the upper echelons of his organization. This was evident from informal interviews in the five units visited and on the author's past experience.

This concept can possibly be linked to the measure of dissatisfaction evident in all the mean scores. All groups indicated a preference for a more participative style. However, in interviews, this was not the case. This confusion as to what is the "best" style of management possibly has led to the skewing of all of the results to the high end of the scale.

If there is to be an impact on the younger airman coming into the service from a society that is more oriented to meeting human needs, then a change will have to be made -- not merely paying lip service to a concept, but an actual involvement and commitment to change.

As a concluding statement, the Air Force could derive a good deal of benefit in pursuing this line of research. However, a major modification in the design needs to be made. Rather than administering a questionnaire, structured interviews might provide a more valid measurement of the Independent Variable. From these interviews, a determination of management category could be made more accurately. Personal experience and this study's findings suggest that the results from such an approach would support the research hypotheses proposed earlier.

BIBLIOGRAPHY

Argyris, Chris. Personality and Organization, New York: Harper & Brothers, 1957.

_____. Organization and Innovation. Homewood, Illinois: Richard D. Irwin, Inc., and The Dorsey Press, 1965.

Bass, Bernard M.; Valenzi, Enzo R.; Farrow, Dana L.; Solomon, Robert J. "Management Styles Associated with Organizationa, Task, Personal and Interpersonal Contingencies". Journal of Applied Psychology 60 (June 1975) 720-729.

Bennis, Warren G. Changing Organizations: Essays on the Development and Evolution of Human Organization. New York: McGraw-Hill Book Co., 1966.

_____, and Slater, Philip E. The Temporary Society. New York: Harper and Row, Publishers, 1968.

Blake, Robert R. and Mouton, Jane Srygley. Corporate Excellence Through Grid Organization Development. Houston, Texas: Gulf Publishing Co., 1963.

Bleda, Paul R.; Gitter, George A.; D'Agostino, Ralph B. "Enlisted Men's Perceptions of Leader Attributes and Satisfaction with Military Life". Journal of Applied Psychology 61 (May 1976) 43-49.

Bowers, Raymond V. Studies on Behavior in Organizations. Athens, Georgia: University of Georgia Press, 1966.

Campbell, John P.; Dunnette, Marvin D.; Lawler, Edward E. III; Weick, Karl E. Jr. Managerial Behavior, Performance, and Effectiveness. New York: McGraw-Hill Book Co., 1970.

Downie, N.M. and Heath, R.W. Basic Statistical Methods (Third Edition) New York: Harper & Row, Publishers, 1970.

Etzioni, Amitai. Modern Organizations. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964.

Friedlander, Frank. Technology, Youth and Organizational Structure: Some Changing Patterns Relevant to the Military. Technical Memorandum No. 7, June 1969. (This report was presented to the Conference on Leadership and Organization in the Post 1970's, held at West Point, New York, June 25-27, 1969. The Conference was sponsored by the Deputy Chief of Staff for Personnel, U.S. Army, and The Superintendent, U.S. Military Academy.

Hersey, Paul, and Blanchard, Kenneth H. Management of Organizational Behavior. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.

Huse, Edgar F., and Bowditch, James L. Behavior in Organizations: A Systems Approach to Managing. Reading, Massachusetts: Addison-Wesley Publishing Co., 1973.

Likert, Rensis. New Patterns of Management. New York: McGraw-Hill Book Co., 1961.

_____. The Human Organization: Its Management and Value. New York: McGraw-Hill Book Co., 1967.

McGregor, Douglas M. The Human Side of Enterprise. Address by Dr. McGregor before the Fifth Anniversary Convocation of the M.I.T. School of Industrial Management.

Miles, Raymond E. "Human Relations of Human Resources". Harvard Business Review (Jul-Aug 1965) 149-156.

Niederhoffer, Arthur. Behind The Shield: The Police in Urban Society. Garden City, N.Y.: Anchor Books, 1969.

Schriesheim, Chester A., and Murphy, Charles J. "Relationships Between Leader Behavior and Subordinate Satisfaction and Performance: A Test of Some Situational Moderators", Journal of Applied Psychology 61 (1976) 634-641.

Slater, Philip. The Pursuit of Loneliness. Boston: Beacon Press, 1976.

Tannenbaum, Robert and Schmidt, Warren H. "How to Choose A Leadership Pattern", Harvard Business Review 36 (1958) 95-101.

Wilson, Ian H. "How Our Values Are Changing", The Futurist (February 1970) 5-9.

APPENDIX I

PRIVACY ACT STATEMENT

In accordance with paragraph 30, AFR 12-35, the following information is provided as required by the Privacy Act of 1974.

a. Authority

(1) 10 USC 8012, Secretary of the Air Force, Powers, Duties, Delegation by Compensation; and/or

(2) 5 USC 301, Departmental Regulations; and/or

(3) EO 9397, 22 Nov 43, Numbering System for Federal Accounts Relating to Individual Persons; and/or

(4) DOD Instruction 1100.13, 17 Apr 68, Surveys of Department of Defense Personnel; and/or

(5) AFR 30-23, 22 Sep 76, Air Force Personnel Survey Program.

b. Principal purposes. The survey is being conducted to collect information to be used in research aimed at illuminating and providing inputs to the solution of problems of interest to the Air Force and/or DOD.

c. Routine uses. The survey data will be converted to information for use in research of management related problems. Results of the research, based on the data provided, will be included in a written doctoral dissertation and/or master's thesis, and may also be included in published articles, reports, or texts. Distribution of the results of the research based on the survey data, whether in written form or presented orally, will be unlimited.

d. Participation in this survey is entirely voluntary.

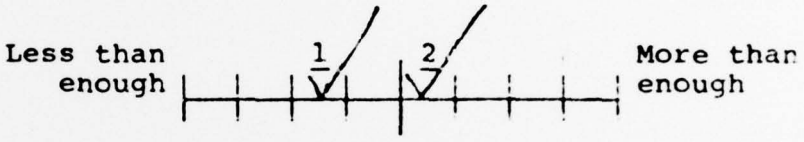
e. No adverse action of any kind may be taken against any individual who elects not to participate in any part or all of this survey.

U.S. AIR FORCE Survey no. 77-98

Please indicate for each item, your opinion, by using the scale to the right of each question. Do so by placing a check (✓) on a place on the scale that most closely fits your answer to a question.

FOR EXAMPLE:

How much money is budgeted for new SP vehicles each year?



If you felt that less than adequate money was budgeted you would place a check at the position indicated by number 1. If on the other hand you felt that slightly more than adequate money was budgeted you would place a check at nuber 2.

GO ON TO THE SURVEY.

1. How much confidence do you have in your subordinates?	No confidence	Total confidence
2. How much do the troops in your unit want to work?	Not at all	Very much
3. How often do you seek out and use subordinates opinions?	Never	Always
4. How much do you rely on each of the following methods to get people to do the job?		
a) Fear	Never	Always
b) Threats	Never	Always
c) Punishments	Never	Always
d) Rewards	Never	Always
e) Involvement	Never	Always
5. How much does information flow from top to bottom in your unit?	Very little	A great deal
6. How much does information flow from bottom to top in your unit?	Very little	A great deal
7. How is downward communication accepted?	With suspicion	With acceptance
8. How much do the troops want to do a good job?	Not at all	Very much
9. How do the troops feel about your unit goals?	Couldn't care less	Want to achieve them
10. At what level are decisions affecting the unit made?	Mostly at top	Shared at all levels
11. How much are subordinates involved in decisions related to their jobs?	Not at all	Fully involved
12. How much decision making authority do you have ?	None	Total
13. How much does the decision making authority contribute to your job satisfaction?	Nothing	A great deal
14. How are the goals of the unit established?	Orders issued at the top	By group action (except in a crisis)
15. How much covert resistance to goals is present among the troops?	Little or none	Strong resistance
16. How much time do you spend in administering disciplinary problems	None	A great deal
17. The troops are allowed to get away with too much in this unit.	Disagree	Agree
18. Disciplinary problems are handled in your unit :	Too leniently	Too harshly

---

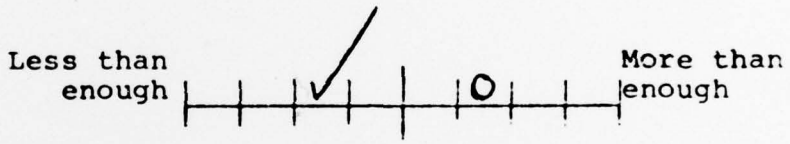
Please fill in the following information.

Years of Service _____ Rank _____ AFSC 811X0 ___ 811X2 ___ (check one)

Now, for each item, indicate how you feel the situation should be, as compared to the way it is. Do this by placing an "O" at the place on each scale that is closest to the way you feel it should be.

FOR EXAMPLE:

How much money is budgeted for new SP vehicles each year?



The "O" was placed on the scale to indicate that more money should be budgeted than actually was indicated by the check. However not more than enough to do the job.

Thank You for your cooperation in filling out this survey.

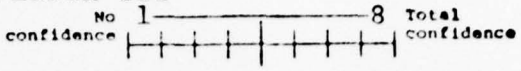
APPENDIX II

_____ AFB

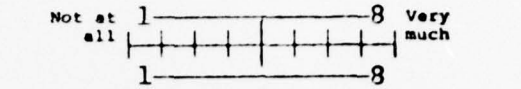
A Flt	B Flt	C Flt	D Flt	Ops	L.E.	Sec	Admin
Cnslng Fms		Cnslng Fms		Cnslng Fms		Cnslng Fms	
Admin Reps		Admin Reps		Admin Reps		Admin Reps	
Incdnt Rpt		Incdnt Rpt		Incdnt Rpt		Incdnt Rpt	
Missd Appt		Missd Appt		Missd Appt		Missd Appt	
Art 15's		Art 15		Art 15		Art 15	
Cntrl Rstr		Cntrl Rstr		Cntrl Rstr		Cntrl Rstr	
Dsql SP's		Dsql SP's		Dsql SP's		Dsql SP's	
Accidents		Accidents		Accidents		Accidents	
Lttr Apprec		Lttr Apprec		Lttr Apprec		Lttr Apprec	
Amn of M.		Amn of M		Amn of M		Amn of M.	
A of Q.		A of Q.		A. of Q.		A. of Q.	
A. of Yr.		A. of Yr		A. of Yr		A.of Yr	
NCOQ		NCOQ		NCOQ		NCOQ	
NcoM		NCOM		NCOM		NCOM	
NCOYr		NCOYr		NCOYr		NCOYr	
Reenlists		Reenlists		Reenlists		Reenlists	
Vol Tst.		Vol Tst		Vol Tst		Vol Tst	
APR		APR		APR		APR	
9 8 7 6	9 8 7 6	9 8 7 6	9 8 7 6	9 8 7 6	9 8 77 6	9 8 7 6	9 8 7 6

APPENDIX III

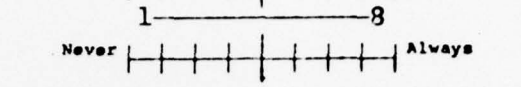
1. How much confidence do you have in your subordinates?



2. How much do the troops in your unit want to work?

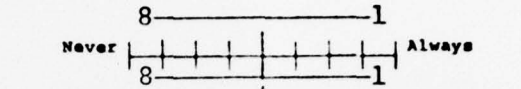


3. How often do you seek out and use subordinates opinions?

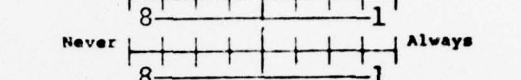


4. How much do you rely on each of the following methods to get people to do the job?

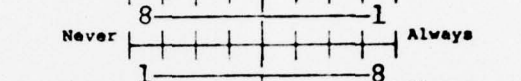
a) Fear



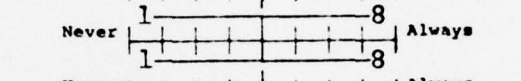
b) Threats



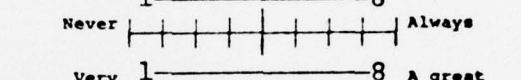
c) Punishments



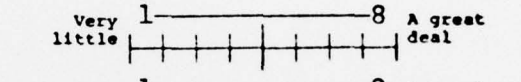
d) Rewards



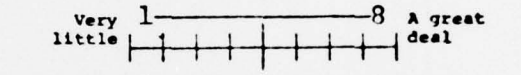
e) Involvement



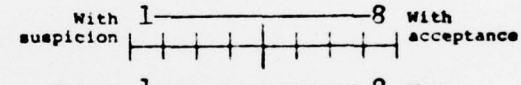
5. How much does information flow from top to bottom in your unit?



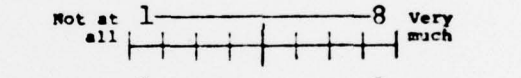
6. How much does information flow from bottom to top in your unit?



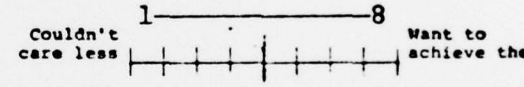
7. How is downward communication accepted?



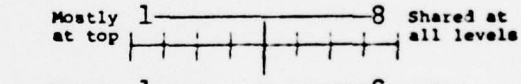
8. How much do the troops want to do a good job?



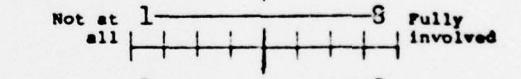
9. How do the troops feel about your unit goals?



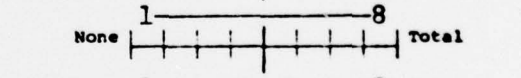
10. At what level are decisions affecting the unit made?



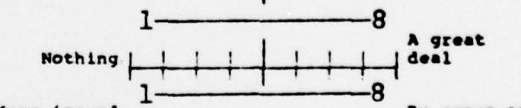
11. How much are subordinates involved in decisions related to their jobs?



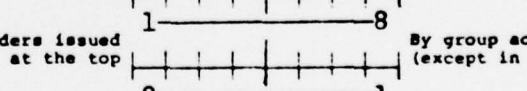
12. How much decision making authority do you have ?



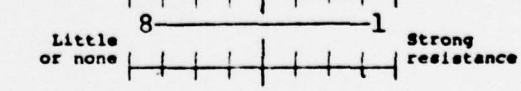
13. How much does the decision making authority contribute to your job satisfaction?



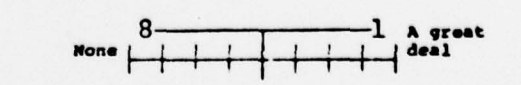
14. How are the goals of the unit established?



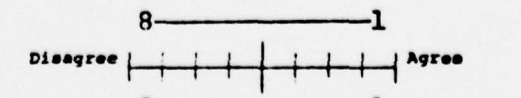
15. How much covert resistance to goals is present among the troops?



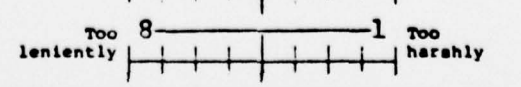
16. How much time do you spend in administering disciplinary problems



17. The troops are allowed to get away with too much in this unit.



18. Disciplinary problems are handled in your unit :



Please fill in the following information.

Years of Service _____ Rank _____ AFSC 811X0 ___ 811X2 ___ (check one)